North Carolina.—Charlotte, 4.00.

Ohio.—Ruggles, 2.00; North Lewisburg, 1.00; Jacksonburg, 1.00; Toledo, 0.50; Westerville, 0.50; Cleveland, trace; Columbus, trace; New Athens, trace.

Oregon.—Umatilla, trace.

Pennsylvania.—Grampian Hills, 8.00; Dyberry, 5.00; Wells-

borough, 2.25; Erie, 2.00; Pittsburg, 0.50.

Texas.—Denison, 1.75; Coleman City, 1.25; Jacksborough,

Utah.—Salt Lake City, trace.

Vermont.—Charlotte, 24.00; Newport, 20.00; Strafford, 18.00; Woodstock, 14.00.

Virginia.—Lynchburg, 4.00; Variety Mills, 4.00; Wytheville,

2.00; Accotink, trace.

Washington Territory.—Spokane Falls, 2.00.

Wisconsin.—Embarrass, 12.00; Ripon, 8.00; La Crosse, 3.50; Beloit, 2.00; Madison, 0.50; Milwaukee, 0.50.

Wyoming.—Fort Washakie, 3.50; Cheyenne, trace.

## SNOW FROM A CLOUDLESS SKY.

Williamsport, Pennsylvania, 26th.—At 3.45 p. m., a heavy snow-storm began, which lasted until 4.30 p. m., after which light snow continued until 6.00 p. m., when the clouds suddenly disappeared, and it continued snowing from a cloudless sky for several minutes.

Huron, Dakota, 10th.—Snow fell from a cloudless sky from 7.00 to 9.00 a. m., presenting a beautiful appearance between the observer and the sun.

SLEET.

Fort Sully, Dakota, 18th. Fort Totten, Dakota, 16th. Fort Warren, Massachusetts, 23d. Fort Assinniboine, Montana, 1st. West Point, New York, 21st. Morrison, Illinois, 19th, 20th. Mattoon, Illinois, 9th. Yates Centre, Kansas, 26th. Charlestown, Massachusetts, 11th. Freehold, New Jersey, 10th. Vineland, New Jersey, 10th. Bordentown, New Jersey, 10th. Lenoir, North Carolina, 20th. Blooming Grove, Pennsylvania, 21st. West Chester, Pennsylvania, 10th. Chambersburg, Pennsylvania, 9th. Ripon, Wisconsin, 19th. Portland, Maine, 23d. New London, Connecticut, 21st. Burlington, Vermont, 21st, 22d. Washington, District of Columbia, 13th. Norfolk, Virginia, 29th. Albany, New York, 21st, 22d. Atlantic City, New Jersey, 30th. Atlanta, Georgia, 19th. Sloop Point, North Carolina, 28th. Louisville, Kentucky, 6th. Columbus, Ohio, 9th. Nashville, Tennessee, 28th. Logausport, Indiana, 5th, 20th. Cleveland, Ohio, 10th. Toledo, Ohio, 5th, 20th, 27th. Detroit, Michigan, 31st. Rochester, New York, 20th. Buffalo, New York, 10th. Oswego, New York, 21st. Mackinac City, Michigan, 19th, 20th. Grand Haven, Michigan, 1st, 4th, 20th. Milwaukee, Wisconsin, 2d. Marquette, Michigan, 19th. Escanaba, Michigan, 21st. Chicago, Illinois, 19th, 23d. Alpena, Michigan, 19th.

Tobacco Garden, Dakota, 3d, 23d. Dubuque, Iowa, 4th, 19th. Duluth, Minnesota, 20th. Madison, Wisconsin, 19th. Saint Paul, Minnesota, 20th. Springfield, Illinois, 18th. Cheyenne, Wyoming, 14th. Fort McKavett, Texas, 31st.

The prevailing direction of the winds during the month of December, 1882, at Signal Service stations are shown on chart ii. by arrows flying with the wind. In the Southern states the prevailing winds are from the north; in the lower lake region, from the west and southwest; along the Atlantic coast and in the Upper Mississippi and Missouri valleys, they are mostly from the northwest; on the Pacific coast they are variable.

## TOTAL MOVEMENTS OF THE AIR. [In miles.]

The following are the largest total movements at the Signal Service stations: On the summit of Mount Washington, New Hampshire, 23,411; Cape May, New Jersey, 12,901; Pike's Peak, Colorado, 12.548; Hatteras, North Carolina, 12,279; Delaware Breakwater, Deleware, 11,809; Kittyhawk, North Carolina, 11,719; Barnegat, New Jersey, 10,573; Block Island, Rhode Island, 10,407; Rochester, New York, 10,087; Port Eads, Louisiana, 10,081; Indianola, Texas, 10,053; Buffalo, New York, 9,948; Galveston, Texas, 9,842; Erie, Pennsylvania, 9,749; Sandy Hook, New Jersey, 9,558; Sandusky, Ohio, 9,474; Fort Shaw, Montana, 9,459; Cape Henry, Virginia, 9,455; Mackinac City, Michigan, 9,397; Champaign, Illinois, 9,096; Milwaukee, Wisconsin, 8,946; Grand Haven, Michigan, 8,757; Oswego, New York, 8,732; Eastport, Maine, 8,545; Moorhead, Minnesota, 8,398; Provincetown, Massachusetts, 8,349; Fort Macon, North Carolina, 8,225; Cleveland, Ohio, 8,167; Newport, Rhode Island, 8,108; Fort Assinniboine, Montana, 8,011. The smallest total movements are: Visalia, California, 1,772; Silver City, New Mexico, 2,156; Fort Missoula, Montana, 2,255; Boisé City, Idaho, 2, 276; Lynchburg, Virginia, 2,284; Lewiston, Idaho, 2,395; Tucson, Arizona, 2,447; Dubuque, Iowa, 2,917.

## HIGH WINDS.

Maximum velocities of fifty miles per hour or more have been reported as follows: On the summit of Mount Washington, New Hampshire, 69 nw., 1st; 54, nw., 2d; 72 nw., 3d; 70 sw., 4th; 84 w., 5th; 116 nw., 7th (maximum for month); 98 nw., 8th; 104 nw., 9th; 61 w., 10th; 83 e., 13th; 98 nw., 14th; 72 nw., 15th; 78 nw., 17th; 60 se., 22d; 66 e., 23d; 72 nw., 24th; 52 n., 28th; 68 nw., 29th; 68 nw., 30th; 96 nw., 30th.

On the summit of Pike's Peak, Colorado, 52 w., 1st; 64 nw., 3d; 72 nw., 4th; 62 w., 5th; 60 nw., 6th; 66 nw., 7th; 66 w., 8th; 54 w., 9th; 68 w., 10th; 86 w., 11th, (maximum for

mouth)

Fort Sill, Indian Territory, 56 n., 7th. Fort Stevenson, Dakota, 52 nw., 3d. Indianola, Texas, 59 n., 7th. Cape May, New Jersey, 62 nw., 7th. Chincoteague, Virginia, 53 nw., 7th. Kittyhawk, North Carolina, 66 ne., 30th. Hatteras, North Carolina, 72 n., 30th. Delaware Breakwater, Delaware, 52 nw., 3d; 57 n., 7th.

## VERIFICATIONS. INDICATIONS.

The detailed comparison of the tri-daily indications for December, 1882, with the telegraphic reports for the succeeding twenty-four hours, shows the general average percentage of verifications to be 87.56 per cent. The percentages for the four elements are: Weather, 89.40; direction of the wind, 83.23; temperature, 89.89; barometer, 87.70 per cent. By geographical districts, they are: For New England, 88.2; middle Atlantic states, 87.1; south Atlantic states, 88.1; eastern ates, 86.5; western Gulf states, 88.8; lower lake region.